Art Unit: 3724 September 3, 2008

Page 6

## Amendments to the Claims.

This listing of claims will replace all prior versions and listings of claims in the application:

## **Listing of Claims:**

1-15 (canceled)

16. (withdrawn) The apparatus according to claim 9, wherein said cutting edge of said blade has a profile that is substantially shaped like a circular arc that is concentric with respect to a path of rotation of said cups conveyed by said carousel, said inlet portion being formed by a plate and a complementary plate for supporting said blade.

17. (New) An apparatus for making a fracture cut in a plastic cap, the plastic cap having an axis of symmetry thereof and comprising a cup with a side wall and a safety ring, the fracture cut being made in the side wall of the cap between the cup and the safety ring, the apparatus comprising:

-a footing and a frame;

-rotary means supported on said footing and provided with at least one mandrel that has a rotation axis thereof and is arrangeable inside the cup of a cap;

-a blade supported on said frame for making said cut with a cutting edge thereof,

-a cap inlet path portion associated with said blade so as to offset the axis of symmetry of the cap with respect to the rotation axis of said mandrel by clamping the cap side wall against said mandrel,

said rotary means being suitable for rotary actuation of the at least one mandrel located inside the cup of the cap to produce rolling of the

Art Unit: 3724 September 3, 2008

Page 7

clamped side wall about the axis of symmetry of the cap and along the

cutting edge of said blade for making said cut; and

-recentering means comprising at least one pusher and cam means

supported at said frame, said cam means being suitable to cause motion of

said at least one pusher to act on the cap side wall for recentering said cap

so that the symmetry axis thereof coincides with said rotation axis of the

mandrel.

18. (New) The apparatus of claim 17, comprising a carousel

supported on said footing and having a vertical axis thereof, said carousel

being provided with said rotary means provided with a plurality of said

mandrels and having a plurality of peripheral seats provided on a first

drum thereof for conveying a plurality of caps between input and output

conveyance means, said footing extending upward with said frame so that

said frame surmounts said carousel.

19.(New) The apparatus of claim 18, comprising a motor and belt

drive elements that are supported on said frame and are suitable to actuate

said rotary means provided with said plurality of mandrels.

20. (New) The apparatus of claim 18, wherein said recentering

means comprise a plurality of pushers, which act each on the side wall of

each one of the plurality of caps in a direction that is substantially radial

and centrifugal with respect to said carousel, said plurality of pushers

being actuated by said cam means.

21. (New) The apparatus of claim 20, wherein each one of said

pushers has a substantially quadrangular shape with a surface thereof for

contact with the side walls of the cups that is convex, said pushers being

each connected to an arm that extends with a stem, said stem being

slidable substantially radially with respect to said carousel within a

Art Unit: 3724 September 3, 2008

Page 8

respective guiding block of said first drum, said stem being connected at a free end thereof to a respective wheel, said cam means comprising a track that is closed in a loop and is provided on a bush that is coaxial to said carousel and is monolithic with said footing, said track being suitable for the rolling of said wheel and having such a shape as to produce radial translational motion of said pusher.

- 22. (New) The apparatus of claim 19, wherein said belt drive elements comprise: a sleeve, which is supported for rotation on a column that is coaxial to said carousel, is rigidly coupled to said footing and is actuated at a respective upper end by said motor; first and second coaxial toothed pulleys that are keyed at a respective lower end of said sleeve; first and second toothed belts wound respectively around said pulleys, said belts being closed in a loop and being suitable for the rotary actuation of a plurality of said mandrels that have vertical axes.
- 23. (New) The apparatus of claim 22, wherein said motor is coaxially connected to said upper end of said sleeve.
- 24. (New) The apparatus of claim 22, comprising a third toothed pulley keyed at said upper end of said sleeve, a respective third toothed belt being wound around said third pulley, said third belt being closed in a loop and suitable for connection to said motor whose axis is parallel to the axis of said sleeve.
- 25. (New) An apparatus for making a fracture cut in a plastic cap, the plastic cap having an axis of symmetry thereof and comprising a cup with a side wall and a safety ring, the fracture cut being made in the side wall of the cap between the cup and the safety ring,

the apparatus comprising:

-a footing and a frame;

Art Unit: 3724 September 3, 2008

Page 9

- a carousel supported on said footing having a plurality of peripheral

seats provided on a first drum thereof for conveying a plurality of caps

between input and output conveyance means;

-rotary means supported on said footing and provided with a plurality of

mandrels that have respective rotation axes thereof, each said mandrel

being arrangeable inside a respective cup of a cap;

-a blade supported on said frame for making said cut with a cutting edge

thereof,

-a cap inlet path portion associated with said blade so as to offset the axis

of symmetry of the cap with respect to the rotation axis of the mandrel

thereinside by clamping the cap side wall against said mandrel,

said rotary means being suitable for rotary actuation of the mandrels

located inside the cup of the cap to produce rolling of the clamped side

wall about the axis of symmetry of the cap and along the cutting edge of

said blade for making said cut; and

-recentering means comprising a plurality of pushers and cam means

supported at said frame, said cam means being suitable to cause motion of

said pushers to act on the side wall of each one of the plurality of caps in

a direction that is substantially radial and centrifugal with respect to said

carousel for recentering each cap so that the symmetry axis thereof

coincide with the rotation axis of the mandrel located thereinside.